

PATENT

Atty. Dkt. No. APPW/003177.D1/CPV/LB/PJS

REMARKS

This is intended as a full and complete response to the Office Action dated January 10, 2006, having a shortened statutory period for response set to expire on April 10, 2004. Please reconsider the claims pending in the application for reasons discussed below.

Claims 1-4, 6-12 and 15-29 remain pending in the application and are shown above. Claims 5 and 13 have been cancelled by Applicant without prejudice. Claims 1-4, 6-12 and 15-29 stand rejected by the Examiner. Reconsideration of the rejected claims is requested for reasons presented below.

Claims 1, 19, 27 and 28 are amended to clarify aspects of the claimed invention. Claim 1 is amended to incorporate the subject matter of claim 5.

Claims 1, 3, 4, 6, 8-12 and 14 stand rejected under 35 USC § 103(a) as being unpatentable over *Tadashi et al.* (Japan 10-324969) in view of *Ngan* (EP 0 840 351). Applicant respectfully traverses the rejection.

Applicant respectfully asserts that *Tadashi et al.* does not teach a method of depositing metallic layers on a substrate as stated by the Examiner. *Tadashi et al.* teaches a method of depositing an "ultra-thin insulator layer" on a substrate [See Machine Translation, ¶ 0001]. *Tadashi et al.* does teach the deposition of a very thin aluminum film on a substrate by introducing a first gas into a vacuum chamber proximate a sputtering target and applying power to the sputtering target and a coil disposed between the sputtering target and the substrate in the presence of only the first gas. However, *Tadashi* does not teach introducing a second gas into the chamber proximate the surface of a substrate while still applying power to the sputtering target and the coil. Instead, *Tadashi et al.* teaches stopping power to the sputtering target prior to the introduction of a second, reactive, gas for the subsequent oxidation or nitridation of an aluminum film to create an insulative layer [See Machine Translation, ¶ 0006]. Further, *Tadashi et al.* only teaches reactive sputtering for the formation of insulating layers and only teaches using a second, reactive, gas for the formation of an insulating layer. *Tadashi et al.* is silent regarding depositing metallic layers on a substrate wherein a second gas is introduced proximate a surface of the substrate to

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encourage metallic deposition. Therefore, *Tadashi et al.*, alone or in combination with other references, does not teach, show, or suggest a method of depositing metallic layers on a substrate as recited in amended claim 1 and claims 3-6 and 8-12, which are dependent thereon. Withdrawal of the rejection is respectfully requested.

Claims 2, 7 and 15-29 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Tadashi et al.* in view of one or more cited references. None of the secondary references cited by the examiner cure the deficiencies of *Tadashi et al.* set forth above as *Tadashi et al.* relates to claims 2, 7 and 15-29. Therefore, withdrawal of these rejections is respectfully requested.

In conclusion, the references cited by the Examiner, alone or in combination, do not teach, show, or suggest the invention as claimed.

Having addressed all issues set out in the office action, Applicant respectfully submits that the claims are in condition for allowance and respectfully requests that the claims be allowed.

Respectfully submitted,



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